

Enzyme	Lipase	Product code: Pro-L100K
Description	A lipolytic enzyme preparation for use in the cereal food as dough/bread improver or the treatment of flours, which is produced by submerged fermentation of a micro organism.	
Usage Rate	The recommended dose rate is usually 5-20 ppm on flour weight, but it could be optimized in the different material (flour) or production process (within a different temperature, pH and processing time).	
Usable ranges	Active at proofing temperatures and at temperature up to 50-65°C. Enzyme will be inactivated quickly above 65°C.	

COMPOSITION

Description	%/Activity ^[1]	Details
Native starch	-	Carrier
Lipolytic enzyme protein	≥ 100,000 units/g	Enterprise Standard

^[1] Standardized activity: In this product the enzyme activity is provided by lipase that hydrolyzes ester bonds into glycerides in company assay method

BACTERIOLOGICAL SPECIFICATION

Aerobic Bacteria count (cfu/g(ml))	50,000 max
Coliform Bacteria (MPN/G)	30max
Enterobacteria E coli(MPN/G)	None Detected
Salmonella(MPN/25G)	None Detected
Antibiotic activity	None Detected

CHEMICAL SPECIFICATION

Heavy metals	< 40 ppm (as Pb)
Arsenic(mg/kg)	3 max
Lead(mg/kg)	5 max
Cadmium(mg/kg)	5 max
Mercury	5 max

PRODUCT CHARACTERISTICS

Appearance ^[2]	white to creamish powder
Loss on drying (%)	≤12
Particle size distribution	80 % between 63 – 224 μm

^[2] Appearance: color may vary from batch to batch and color intensity is not an indication of enzyme activity

PRODUCTION ORGANISM

Enzyme production organism of Lipase PRO-L100K	Aspergillus niger
The enzyme protein, which in itself is not genetically modified, is separated and purified from the production organism.	

Profood International, Inc. 600 Industrial Dr., Suite 201, Naperville, IL 60563

☎: +1-888-288-0081; 630-428-2386 ☎: +630-527-9905 ✉: support@profoodinternational.com

ALLERGEN INFORMATION

Component	Presence
	As an ingredient In the recipe
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) and products there of	NO
Crustaceans and products thereof	NO
Eggs and products thereof	NO
Fish and products thereof	NO
Peanuts and products thereof	NO
Soybeans and products thereof	NO
Milk and products thereof (incl. Lactose)	NO
Nuts i.e. almonds (<i>Amygdalus communis</i> L.), hazelnuts (<i>Corylus avellana</i>), walnuts (<i>Juglans regia</i>), cashews (<i>Anacardium occidentale</i>), pecan nuts (<i>Carya illinoiesis</i> (Wangenh.) K. Koch), Brazil nuts (<i>Bertholletia excelsa</i>), pistachio nuts (<i>Pistacia vera</i>), macadamia nuts and Queensland nuts (<i>Macadamia ternifolia</i>), and products thereof	NO
Celery and products thereof	NO
Mustard and products thereof	NO
Sesame Seeds and products thereof	NO
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO ₂	NO
Lupin and products thereof	NO
Molluscs and products thereof	NO

PACKING

- 10/25kg cardboard drum; it is available in different types of packaging. Please contact the sales representative for more information.

STORAGE CONDITIONS

- Recommended storage: 0-25 °C(32-77 °F)
 - Packaging must be kept intact, dry, and away from sunlight. Please follow the recommendations and use the product before the best before date to avoid the need for a higher dosage.
 - Best before: You will find the best before date in the certificate of analysis or on the product label. Hereafter a re-assay is advisable.
 - The product gives optimal performance when stored as recommended and used within 24 months of the production date.
 - delivery at least 12 months prior to the best-before date.
-

SAFETY AND HANDLING PRECAUTIONS

Enzymes are proteins. Inhalation of dust or aerosols may induce sensitization and may cause allergic reactions in sensitized individuals. Some enzymes may irritate the skin, eyes, and mucous membranes upon prolonged contact. See the MSDS or Safety Manual for further information regarding safe handling of the product and spills.

QUALITY CERTIFICATES STATUS

The product complies with the recommended purity specifications food-grade enzymes given by the Joint FAO/WHO Expert Committee Additives (JECFA). ISO22000-2005, ISO 9001- 2008, Kosher and Halal certificates are available from the Customer Center or sales representative.

The information contained in this publication is based on our own research and development work and is to the best of our knowledge reliable. Users should, however, conduct their own tests to determine the suitability of our products for their own specific purposes and the legal status for their intended use of the product.